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10/811,244	03/26/2004	Suman Preet Singh Khanuja	U 015108-9	9004

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EXAMINER

HAAS, WENDY C

ART UNIT PAPER NUMBER

1661

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/811,244

Applicant(s)

KHANUJA ET AL

Examiner

Wendy C. Haas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to under 37 CFR 1.165(a) and 37 C.F.R. 1.84(u)(1) as they contain captions. Drawings must be labeled with –FIG.—and a number or may be unlabeled. The use of photo captioning is not acceptable in United States Plant Patent Applications. Correction is needed..

### ***Specification***

The use of the trademark pBluescript has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks. Applicants are advised that other trademarks appearing in the Specification, if any, should be treated in the same manner.

### ***Objection to the Disclosure***

#### **37 CFR 1.163**

The following is a quotation of section (a) of 37 CFR 1.163:

(a) The specification must contain as full and complete a disclosure as possible of the plant and the characteristics thereof that distinguish the same over related known varieties, and its antecedents, and must particularly point out where and in what manner the variety of plant has been asexually reproduced. In the case of a newly found plant, the specification must particularly point out the location and character of the area where the plant was discovered.

#### **35 USC § 112**

The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

As specific to United States Plant Patent applications, the specifics of 37 CFR 1.164 (reproduced below) are controlling:

The claim shall be in formal terms to the new and distinct variety of the specified plant as described and illustrated, and may also recite the principal distinguishing characteristics. More than one claim is not permitted.

In plant applications filed under 35 U.S.C. 161, the requirements of 35 U.S.C. are limited. The following is a quotation of 35 U.S.C. 162:

No plant patent shall be declared invalid for noncompliance with section 112 of this title if the description is as complete as is reasonably possible. The claim in the specification shall be in formal terms to the plant shown and described.

The disclosure is objected to under 37 CFR 1.163 (a) and under 35 U.S.C. 112, first paragraph, because the specification presents less than a full, clear and complete botanical description of the plant and the characteristics which define same per se and which distinguish the plant from related known cultivars and antecedents.

More specifically:

- A. A new title is suggested: -- *Artemisia* Plant Named 'CIM-AROGYA' --.
- B. A new claim is suggested: -- A new and distinct variety of *Artemisia* plant as herein illustrated and described.--.

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C. The application is objected to under 37 CFR 1.163(a) because the specification does not "particularly point out where and in what manner the variety of plant has been asexually reproduced". Correction is required.

D. The disclosure is not in the format specified by 37 CFR 1.163. Applicants must re-format the disclosure to comply with 37 CFR 1.163. United States Plant Patent Number 12,788 is provided as an example from the same market class as the instantly claimed plant.

E. Applicants are requested to provide an illustration of the flowers if the claimed plant, if available, in order to provide as complete a botanical description of same as is reasonably possible.

F. Page 2, line 2, applicants are requested to provide a definition for the word "recrudescence" by comment as the meaning of the term is unclear to the Examiner.

G. Page 3, line 12, and other locations throughout the Specification, applicants refer to "marker assisted breeding" but fail to specify what exactly the term is intended to signify. If it is the process described on pages 5-12 of the Specification, applicant should so state by amendment or comment. If not, further clarification of the term is needed.

H. Page 3, line 18, applicants refer to the common name of the plant as "Qinghao". Lines 15 and 16 set forth the botanical name of the plant as *Artemisia annua*. Page 1, line 19, sets forth

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“qinghao” as a common name for *A. apiacea*. Correction and/or clarification of this discrepancy is needed.

I. Applicants should provide the typical and observed plant spread or diameter for the claimed plant.

J. Throughout the specification, applicant refers to numbers in confusing terms. For example, Page 3, line 30 the number of primary branches is set forth as “– 55 – 65”. It is unclear whether applicant intends to set forth the number of branches as – from – 55 to 65 – or something else by this recitation. A plant cannot have a negative number of branches and ranges should be set forth in words, i.e. – 55 to 65 branches – in order to diminish confusion.

K. Page 3, line 26, applicants are requested to specify what the recitation “(app)” is intended to signify.

L. Page 3, applicants should provide the typical and observed upper and lower leaf coloration with reference to the employed color chart. Applicants should also provide leaf venation pattern and coloration for the leaves of the claimed plant in order to provide as complete a botanical description as is reasonably possible.

M. Page 4, line 1, the correction botanical term for “non pubescent” is – glabrous --.

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N. Page 4, applicants should provide the typical and observed leaf base and margin shapes for the leaves of the claimed plant.

O. Page 4, line 5, "Petiol" appears to be misspelled. If applicants intend to describe the – Petiole --, the application should be amended to reflect that.

P. Page 4, line 10 "rranged" appears to be misspelled. Correction is needed in order to lend substantive meaning to the recitation.

Q. Page 4, applicants must fully and separately describe the ray and disc florets of the inflorescence, providing, for example, upper and lower petal surface coloration for each type of floret. It is also suggested that applicants arrange the information about the ray and disc florets already of record in the Specification into a more organized format for clarity.

R. Applicants set forth the coloration of the Inflorescence in at least two separate locations and provide at least two different color designations. Correction of this discrepancy is needed.

S. Applicants set forth "Time of flowering" as 198 days, but fail to specify from when the 198 days is measured. Is it from planting of seed, as is the conventional measure for days to flowering in the art? Applicants are reminded that the claimed plant must be asexually reproduced to qualify for patent protection under 35 U.S.C. § 161. Similarly, applicants describe "Seed setting" as "240 days (app)" more information is needed to clarify this recitation as well.

T. Applicants set forth the “Atremisinin content”, “Artemesinic acid” and “Oil content” in percentages, but fail to specify whether the percentages are based on fresh weight or dry weight. Further information is needed.

U. Page 4, line 30, applicants should place units with the number “2.5” in order to lend the recitation substantive meaning.

V. Page 4, line 32, a search of the Garden Web Glossary of Botanical Terms has not revealed a defined meaning for the word “capitula”. Applicant is requested to provide a definition for the term, as it does not appear to be a term of art.

W. Page 4, line 37, applicants describe the dry leaf yield as “about 50 Q”. It is unclear what “Q” signifies as a unit. Clarification is needed.

X. Page 4, lines 10 and 38, applicants describe the flowers as “(7A)”, but fail to signify what “(7A)” is intended to express. If it is a reference to the employed color chart, such should be stated as – RHS 7A--, as should other similar recitations throughout the Specification. Clarification is needed.

Y. Page 6, applicant refers to “TLC”. It is unclear what this acronym is intended to signify. Correction and/or clarification is needed.



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Z. Flow sheet 1 on pages 9 and 10 must be submitted as a Figure. Flow charts are not printable in the body of United States Plant Patents. **CHECK ON THIS**

AA. Page 11, the table at the top of the page refers to some of the dates as (# DAP). It is unclear what "DAP" is intended to signify. Correction and/or clarification is needed.

BB. Page 11, last line, the Examiner is unclear what the term "rouging" is intended to signify. It does not appear to be a term of art. A definition is requested.

The above listing may not be complete. Applicants should carefully compare the claimed plant with the botanical descriptions set forth in the specification to ensure completeness and accuracy and to distinguish the plant within this expanding market class. Any further botanical information should be imported into the specification, as should any additional or corrected information relative to same.

### ***Claim Rejection***

#### ***35 USC § 112, 1st and 2nd Paragraphs***

Claim 1 is rejected under 35 U.S.C. 112, first and second paragraphs as not being supported by a clear and complete botanical description of the plant for reasons set forth in the Objection to the Disclosure Section above, and under 35 U.S.C. 112 first paragraph for the reasons advanced in the objection to the drawings.

***Claim Rejections 35 U.S.C. § 161***

Claim 1 is rejected under 35 U.S.C. § 161 because it is not clear that the claimed plant has been asexually reproduced. Applicants appear to have created multiple plants by sexual means and has attempted to prove they are genetically similar in order to create the cultivar of the claimed plant. The Specification indicates that the claimed plant originated as a population of plants from a series of seed lots (*see, e.g.*, Flow Sheet 1, pages 9 and 10.) The claimed plant must originate as a single plant and the must be asexually reproduced to create multiples of the same initial plant to qualify for patent protection under 35 U.S.C. § 161 *et seq.* The claimed invention may qualify for patent protection under 35 U.S.C. § 101. Applicant is invited to file a continuation or continuation-in-part under 35 U.S.C. § 101 to pursue patent protection for the claimed plant.

***Conclusion***

No claim is allowed.

***References Cited***

The references cited but not applied in any rejection herein are made of record to show the state of the art.

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***Future Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wendy C. Haas whose telephone number is (571) 272-0976. The examiner can normally be reached on Monday through Friday 9:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on (571) 272-0811. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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Art Unit 1661